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THE MARRIAGE RATE IN MICHIGAN, 1870-1890.

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The term marriage rate is applied to a means of measuring and expressing in figures the strength of the social tendency or desire to marry, so far as that tendency finds realization in marriage. All exact science must be based on counting and measuring. Political economy is more exact than other social sciences, largely because price is so good a measure of the intensity of economic desires. "Money . . . is the centre around which economic science clusters . . . because in this world of ours it is the one convenient means of measuring human motive on a large scale" (Marshall, *Principles of Economics*, 2nd ed., p. 76). The extent and intensity of a community's desire for shoes are approximately measured by the number taken and the price paid. Political economy has usually given greater attention to price, and laid less emphasis on the number sold in proportion to the population, — that is, it has analyzed the *intensity* of an economic demand more carefully than its *extent*, and naturally so, because in the recorded fluctuations of price the materials for such an analysis were afforded. But how is a social desire like that for marriage to be measured? Clearly, no means for measuring its intensity are available. The sacrifice involved as a price cannot be measured in money. But in its other aspect,

its extent, the strength of the social desire to marry may be measured by finding the proportion of the community who yield to it in a certain length of time, usually a year, and this measure of the marriage tendency is given by the marriage rate. The marriage rate, then, is a means of measuring the extent of the social tendency to marry. If we assume the strength of this tendency to remain approximately constant, as it usually does in a large population, and for periods of a few years, the number of marriages will vary with the varying strength of all the social and economic forces that in civilized communities tend to counteract the tendency to marry, and thus the variations in the rate themselves become measures of the variations in the strength of these counter-acting influences.

But how is this measuring done? If we knew that in one community 98 per cent of the population buy at least one pair of shoes every year, and in another community only 85 per cent do so, the knowledge might lead to interesting inferences regarding one phase of the economic condition of the two communities. But the sales of shoes and the names of the purchasers are not registered, so that the records from which this knowledge might be obtained do not exist. On the other hand, we may compute from existing records what proportion of the community each year gratifies the desire for marriage. To do this three methods of varying degrees of accuracy are employed. The number of marriages, or of persons marrying, may be compared, first, with the total population, or, secondly, with the total population of marriageable age, or, thirdly, with the total number of unmarried persons of marriageable age. The general principle is that, in measuring the extent of any social phenomenon, a comparison should be made between the number of cases in which the phenomenon occurs, and the number in which it might occur, *i. e.*, compare the actual cases with the possible. Obviously, it is impossible for children to marry, and in a monogamous country for persons already married to marry again. Hence, these

classes should, if practicable, be disregarded in making the comparison. If the question is now asked, When is a marriageable age reached? the answer is not easy. As a matter of fact, in those states where the age of the parties is given we find that in a year there are seldom a score of girls who marry under fifteen, and no more boys who marry under eighteen. Hence, it would be best to fix these as the lower limits, but the difficulties of the problem would be so much increased by the complication of assuming different ages for the two sexes that it is more common to take fifteen as the age at which a person of either sex becomes marriageable. As the number of marriages must be compared with the population of the same year, it becomes necessary to estimate the latter for the years in which no census was taken. The method of estimation used in this article is that of assuming that the amount of increase, and not its rate, was the same for each year. This simple method will give results sufficiently accurate for the matter in hand. Fortunately, Michigan is among the very few states in which all three methods above indicated are possible. The national and state censuses give the total population in 1870, 1874, 1880, 1884, and 1890, and in each census, except that of 1874, the population over fifteen is also given. On the other hand, the censuses of 1874, 1884, and 1890 give the number of persons married, and so make the last method available. The results are contained in the table on next page.

In considering this table it is necessary to ask how completely marriages are recorded in Michigan, for on the accuracy of the figures given in the second column depends the trustworthiness of all subsequent inferences. The question comes home with especial force to anyone who knows how unusual it is to find in the United States a trustworthy record of marriages covering a score of years.

Michigan, however, is one of the few states in this country in which the number of marriages has been reported for some years with approximate accuracy. In the "Report on Mar-

MICHIGAN MARRIAGE RATE, 1870-1890.*

Years.	Number of Marriages.	Marriages to 1000 People.	Marriages to 1000 People over 15.	Marriages to 1000 Unmarried People over 15.
1870	9,791	8.26	13.31	36.5
1871	10,605	8.68	13.91	37.7
1872	10,752	8.53	13.61	36.0
1873	11,897	9.17	14.56	38.0
1874	12,289	9.21	14.55	37.6
1875	11,879	8.57	13.49	34.8
1876	11,913	8.30	13.00	33.5
1877	11,899	8.00	12.50	32.1
1878	12,880	8.38	13.03	33.5
1879	13,892	8.75	13.56	34.8
1880	14,935	9.12	14.08	36.1
1881	15,894	9.33	14.45	37.1
1882	16,796	9.62	14.75	37.9
1883	17,174	9.54	14.58	37.6
1884	15,989	8.62	13.14	33.9
1885	15,885	8.38	12.73	32.6
1886	16,665	8.61	13.05	33.2
1887	17,179	8.70	13.14	33.3
1888	17,297	8.58	12.91	32.6
1889	18,316	8.91	13.38	33.5
1890	18,577	8.87	13.27	33.1
Change.		+ .61	— .04	— 3.4

riage and Divorce in the United States, 1867-1886," issued by the national Department of Labor, three groups of states are by implication recognized, one in which the number of marriages has been given for the whole period with practical completeness, including Vermont, Massachusetts, Rhode Island, Connecticut, Ohio, and the District of Columbia; a second in which the statistics of marriage are at present fairly perfect, including New Hampshire, New Jersey, Delaware, Maryland, Illinois, Michigan, Wisconsin, Minnesota, and Kansas; and a third including the other states and territories in which the marriage records are either entirely lacking or so imperfect and fragmentary that they have not been carried out in the state totals. For the first years after the Civil War the figures for Michigan were very imperfect, but since

* In the preparation of the tables for this article I have been aided by Mr. F. S. Crum, a graduate student at Cornell, and member of the class in social statistics.

1870 they have been comparatively good. The student, however, must be warned against accepting the figures given for each year in the *Michigan Registration Report* of the same year, and followed in the national report. These figures are usually enlarged in later volumes by the inclusion of delayed returns. For example, in the *Michigan Registration Report* for 1884 the number of marriages in that year is given as 15,002. But in the report for 1885 the number of marriages in 1884, corrected for additional returns, is given as 15,721; in the report for 1886 it stands as 15,863; and in the next report the number appears in its final form as 15,989. By taking the number for each year as it appears after the final correction a column of figures representing the marriages in each year is obtained which differ widely from the series as first printed. But in doing this one is occasionally baffled by finding that the same volume of the *Registration Report* may present contradictions that are irreconcilable, giving the same datum differently on different pages. (Compare the table marked Exhibit A with Table 30 in several recent volumes.) These corrections made in the later reports, and the modifications they introduce, were first carefully examined by Mr. C. M. Rippey in an editorial printed some months since in the *Detroit Tribune*, and his tabulation of the marriages and computation of the marriage rates are followed in the table above. In some cases his figures are open to question, as elsewhere contradicted in the volume from which he has taken them, but in the main these variations are slight.

Let it be granted that the corrected figures he gives represent truly, and without omissions, all the marriage ceremonies that have been solemnized in Michigan. A foreign student, or even a native not familiar with our law, would be in danger of leaping to the conclusion that they include all the marriages. In studying our marriage rates, however, it must be borne in mind that in few of our states is any ceremony necessary to constitute a marriage, and in this respect Michi-

gan agrees with the majority. For example, in a case decided in 1884, Chief Justice Cooley, of Michigan, said, "An actual ceremony of marriage is not essential to the establishment of the relation of husband and wife; it is sufficient that a man and woman of due competency, and in respect to whom no impediment exists, consent to take each other as husband and wife, and actually cohabit as such." (*Peet vs. Peet*, 52 Mich. 467.) It is impossible to judge how many "common law" marriages are contracted in Michigan without ceremony or registration, and whether the number is increasing or decreasing, but in studying the question their possibility should be remembered.

The first and second columns in the table, taken from Mr. Rippey's article before cited, illustrate the first method of computing the marriage rate; the third and fourth columns illustrate the other and better methods. If the question be asked, Has the marriage rate of Michigan increased or decreased during the past twenty years? the answer given by the first method is, there has been an increase of .61, or about $7\frac{1}{2}$ per cent; the answer of the second method is, there has been practically no change, a decrease of .04 or .3 per cent; while the answer of the last and most accurate method is, there has been a decrease of 3.4, or about $9\frac{1}{2}$ per cent. At first glance these discrepant results may seem puzzling and inexplicable, but they are easily reconciled. In the first place the proportion of children in Michigan has been decreasing, and the proportion of persons over fifteen increasing. In 1870 the per cent of persons over fifteen was 61.9; in 1880 it was 64.7; in 1884, 65.5; and in 1890, 66.8. The population of marriageable age has thus increased considerably faster than the total population, and while the marriages have increased somewhat faster than the total population, they have only just kept pace with the increase of population of marriageable age. But the number of unmarried persons over fifteen including the widowed and divorced has increased with yet greater rapidity. In 1874, of the population over

fifteen, 38.6 per cent were unmarried; in 1884 there were 39.2 per cent unmarried, and in 1890 the percentage was 40.1. So that the number of marriages has failed to keep pace with the number of marriageable persons, and hence the last column shows a decrease. We may conclude, then, that the marriage rate of Michigan has decreased about 9 per cent between 1870 and 1890.

The effect of the hard times in decreasing the marriage rate may easily be traced in the decline from 1874 to 1877. The depression apparently affected a manufacturing state like Massachusetts earlier and more powerfully than it did an agricultural state like Michigan, for in Massachusetts the sharp decline began in 1874, the year in which Michigan reached its maximum, and continued till 1879, while in Michigan the lowest point was reached two years earlier. In Massachusetts the total fall was 29 per cent of the maximum rate, while in Michigan it was only 13 per cent, less than one-half as great. In 1885 a second minimum, also probably due to business depression, may be noted in Michigan as in Massachusetts and elsewhere.

It has been shown that the marriage rate of Michigan has decreased. This may be due merely to postponement of marriage to a later period of life rather than greater abstinence from it, and Mr. Rippey, in the editorial already cited, is inclined to explain the decrease in that way. He points out that between 1874 and 1890 the average age of grooms increased .78 of a year (from 28.07 to 28.85), and the average age of brides increased 3.11 years (from 21.19 to 24.30). One may be inclined to accept the statement that marriage is contracted later in life, and yet question whether the above facts, apparently conclusive as they are, prove it or give any measure of the postponement of marriage. For in obtaining these averages all second and subsequent marriages have been included. The important question is, At what age is marriage contracted for the first time? But, it will be said in reply, the proportion of second or later marriages has probably

remained about the same, and so the error is a constant one. Quite the contrary. The average age of the citizens of Michigan has been increasing, and thus the proportion of widows and widowers has risen. For example, between 1874 and 1890 the total population increased 57 per cent, but the number of widows and divorced women meantime increased 88 per cent. It is impossible, therefore, to derive from the Michigan records any clue to the average age at which marriage is first entered by either sex, and *a fortiori* any measure of the postponement of marriage which has almost certainly been in progress. It is much to be desired that the state authorities would follow the example of Massachusetts and Rhode Island, and give us tables in which marriages are grouped into those between bachelors and maids, bachelors and widows or divorced women, widowers or divorced men and maids, widowers or divorced men and widows or divorced women, with distinction of age groups for each sex in each case.

The above are all the conclusions that I have been able to derive from a study of the rates of marriage in Michigan year by year. Before closing, however, it may be interesting and valuable to institute some comparisons between the proportion of persons of each sex married in Michigan and in other regions. The facts in regard to Michigan have been kindly furnished me, in advance of their publication, by Dr. J. S. Billings, in charge of this division of the Eleventh Census. The only state giving approximately comparative facts in its own census is Rhode Island, and for further comparison I have included England and Wales.

NUMBER OF MARRIED MEN TO 1000 OF EACH AGE GROUP.

Ages.	Michigan, 1890.	Rhode Island, 1885.	England and Wales, 1881.
15-19	2	7	5
20-24	159	174	221
25-34	624	588	669
35-44	836	800	826
45-54	870	?	849
55-64	855	?	779
65+	727	?	587

The above should be read as follows: Among every thousand young men in Michigan, in 1890, between the ages of fifteen and twenty, two were married, etc. It appears from the table that the probability of a young man's marrying before he is twenty is over twice as great in England, and over three times as great in Rhode Island, as it is in Michigan. Between twenty and twenty-five, also, the likelihood of marriage among men is greater in England or Rhode Island than in Michigan. Between twenty-five and thirty-five there are more married men in Michigan than in Rhode Island, but fewer than in England, while after thirty-five the proportion of married men is greater in Michigan. One would naturally suppose that in a relatively new state like Michigan the means to support a family would be obtained earlier in life, and more easily than in densely settled communities, and, hence, that marriages would occur earlier, and in greater numbers. It seems probable, however, that the better economic conditions are more than counterbalanced during the earlier periods by the fact that women are still in a minority in Michigan, while in Rhode Island and Massachusetts they largely outnumber the men. The excess of men in Michigan in 1890 is shown by the following table:—

PERSONS OF EACH SEX IN 10,000 OF EACH AGE GROUP.

Ages.	Males in 10,000.	Females in 10,000.	Difference.	
15-19	5,003	4,997	6	
20-24	5,136	4,864	272	
25-34	5,343	4,657	686	
35-44	5,412	4,588	834	
45-54	5,347	4,653	694	
55-64	5,365	4,635	730	
65+	5,420	4,580	840	

If every woman in Michigan were to marry, and to marry a man of the same age group as herself, the number of men that would remain unmarried in 10,000 persons of each age group is indicated in the last column, and, although men do

marry women on the average several years younger, yet the result must be the same, and a man's likelihood of finding a wife be somewhat less in a state like Michigan than in one where the difference is on the other side, as it is in Rhode Island. If this explanation be correct, one would surmise that the combination of better economic conditions and the excess of men in Michigan would make the proportion of married women in that state considerably greater than in Rhode Island, or in England. The table below will show that the anticipation is in accordance with the facts.

NUMBER OF MARRIED WOMEN TO 1000 OF EACH AGE GROUP.

Ages.	Michigan, 1890.	Rhode Island, 1885.	England and Wales, 1881.
15-19	90	49	25
20-24	496	315	331
25-34	814	633	681
35-44	878	738	765
45-54	829	?	711
55-64	706	?	581
65+	422	?	326

From the above it appears that the likelihood of a girl's marrying before she is twenty is not far from twice as great in Michigan as in Rhode Island, and over three and a half times as great as in England. Between twenty and twenty-five about three women are married in Michigan for every two in Rhode Island or England, and for the later periods the proportion of women married exceeds that in England by from 15 to 30 per cent.

The same difference between Michigan and England may be brought out in another way by comparing, not the number of persons reported as married in the census, but the marriage rates for two years. Unfortunately, I cannot choose the same year, but am obliged to compare, as above, the figures for 1881 in England with those for 1890 here.

MARRIAGE RATE OF THE SEXES BY AGE GROUPS.

Ages.	Males.		Females.	
	Michigan, 1890.	England, 1881.	Michigan, 1890.	England, 1881.
15-19	3	5	62	22
20-24	82	93	154	122
25-34	120	110	123	84
35-44	75	63	60	33
45-54	53	38	30	14
55-64	40	22	10	5
65+	13	5	2	0.6

Here again much the same results appear. Up to twenty-five, men in England marry in larger proportions than in Michigan, but after that age the rate in Michigan is greater. The difference shown in the period between twenty-five and thirty-five, by the two methods, may be due either to the difference in the years compared or to accidental causes. On the other hand, the marriage rate of women in Michigan is uniformly and considerably higher than it is in England. In the light of these facts a social reformer, if animated by the belief that marriage should be the goal of a woman's ambition, might apply the doctrine of Horace Greeley to the fairer sex, and urge them to emigrate westward if they would cure their social ills. But a scientific student knows that the tendency of almost every migration to a new country is to bring about a partial and temporary separation of the sexes, and that the interplay of natural and social forces gradually restores an approximate equality of numbers.